## STATE OF MICHIGAN

## BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of SOUTHEASTERN MICHIGAN GAS COMPANY for a certificate of public convenience and necessity for the Yankee Gas Storage Field in St. Clair Township, St. Clair County, Michigan.

Case No. U-5359

At a session of the Michigan Public Service Commission held at its offices in the City of Lansing, Michigan, on the 11th day of July, 1977.

PRESENT: Hon. Daniel J. Demlow, Chairman
Hon. Lenton G. Sculthorp, Commissioner

## ORDER GRANTING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

On February 24, 1977, Southeastern Michigan Gas Company (Applicant) filed an application for a certificate of public convenience and necessity pursuant to the provisions of Section 2, 1923 PA 238, as amended, being MCLA 486.252. Under the provisions of MCLA 486.252, the Commission must make two determinations. First, the Commission must determine that the present or future public convenience and necessity will be served by the acquisition of property for use as a natural gas storage field. Second, the Commission must determine that the field is safe for development and the operation of gas storage.

Pursuant to due notice, a Kearing was held on April 29, 1977. Applicant presented one witness and thirteen exhibits. The Commission Staff (Staff) presented two witnesses who supported the application. Also present was a Mr. William Maisel who appeared and made a statement pursuant to Rule 16. Mr. Maisel is related to

one landowner from whom Applicant is yet to acquire certain rights. Applicant and the Staff waived compliance with the provisions of Section 81 of the Administrative Procedures Act.

From the application, evidence presented at the hearing, and the records and files of the Commission, it appears that:

- 1. Applicant is a Michigan corporation with its principal offices at 405 Water Street, Port Huron, Michigan and is engaged as a public utility in the business of supplying natural gas to the public in its service areas in the State of Michigan.
- 2. Applicant has two service areas being (i) its Eastern Area consisting of three divisions encompassing certain territories in the Counties of Lapeer, Macomb, St. Clair, Sanilac and Tuscola and (ii) its Albion Area consisting of certain territories in the Counties of Calhoun, Hillsdale and Jackson. The three divisions of the Eastern Area are collectively referred to as the Eastern Division and the Albion Area is referred to as the Albion Division.
- 3. Applicant receives the gas it distributes from Panhandle Eastern Pipe Line Company (Panhandle), local production and special contracts with Michigan Consolidated Gas Company.
- 4. Since 1970, due to the natural gas shortage, Applicant has been required to impose increasingly stringent restrictions on the extent to which it holds itself out to provide service to new or additional customers and to provide additional service to existing customers. Such measures were and are necessary because Applicant cannot obtain increased contract demands from Panhandle, and Panhandle has not been able to deliver its contracted demands, with shortfalls being spread among Panhandle's customers, pursuant to interim curtailment procedures pending before the Federal Power Commission in Docket RP71-119. In December of 1974, Applicant curtailed all new and additional service for the foreseeable future.
  - 5. Applicant is undertaking to supplement its available gas supply by purchases

of local production and by purchases from Michigan Consolidated Gas Company. Applicant is also undertaking to maximize its ability to take such gas as is available and to maintain its ability to provide winter service by development of additional gas storage capability.

6. Applicant's present gas storage capability consists of its Morton No. 16
Storage Well located in the City of Marysville, St. Clair County, which has been in operation as a gas storage facility since 1962 and has a working capacity of 300 MMcf. Applicant is now testing and developing caverns created by five additional salt wells located adjacent to its Morton No. 16 Well which, if they can be fully utilized, would provide an additional 3,200 MMcf of working gas storage capacity.

In addition, Applicant proposes to convert the Yankee Gas Field, located in Sections 25 and 26 of St. Clair Township, St. Clair County, to a gas storage field, which would add additional working gas storage capacity of 450 MMcf. Applicant, therefore, requests authorization from this Commission to acquire the necessary property rights or interests to develop as a natural gas storage field the existing Yankee Gas Field located in Sections 25 and 26 of St. Clair Township, St. Clair County. Applicant has acquired by purchase all necessary rights to operate the Yankee Gas Field as a gas storage facility, except for storage and mineral rights to certain peripheral areas.

- 7. The Staff testified that adequate storage facilities are in the public interest because the facilities permit pipeline suppliers to operate at close to 100% of capacity and thus reduce the cost to the distributing utility. The presence of gas storage facilities has been instrumental in keeping the price of gas to Michigan consumers very low. The Staff further stated that to plug and abandon a depleted field would be economic waste when the field is suitable for conversion to storage and Applicant has the need for additional storage.
- 8. The Staff presented testimony by a qualified expert on the question of the safe development and operation of the proposed gas storage reservoir in the Yankee Gas

Field.

The Yankee Gas Field was formerly an operating-producing dry gas field which produced approximately 357 million cubic feet of gas since October, 1972. It is located in a rural-agricultural area and operated during its production years with no material adverse environmental impact. The Yankee Gas Field was described as being a Salina Niagaran reef, a stratigraphic trap composed of porous and permeable dolomite with a maximum pay thickness of approximately 70 feet. The reef crest is at an approximate depth of 2,620 feet. Immediately above the A-1 Carbonate which overlies the reef itself is a Salina A-2 Anhydrite which has been characterized as a "super caprock" by Ibrahim, Tek and Katz in their report, "Threshold Pressure in Gas Storage," published by the American Gas Association in 1971.

- 9. The gathering system will consist of approximately 1,800 feet of 6 5/8-inch 0.D.  $\times$  0.280 W.T. Grade B pipe with a maximum design pressure of 1,400 psig. The gathering system will be constructed, tested and operated in accordance with the Michigan Gas Safety Code.
- 10. The field would have a maximum allowable operating pressure of 1,400 psig at the wellhead and the pressure in the reservoir will not exceed the threshold pressure of the caprock and attendant gas migration will not occur.
- II. Applicant proposes to convert the two producing gas wells into facility wells. Two dry holes within the storage area will be replugged to preserve the integrity of the field. The two dry holes to be replugged will have a cement plug placed from a total depth to 200 feet or more above the A-2 Anhydrite Formation. In the opinion of the Staff witness, the field can be safely used as a gas storage facility by accomplishing the abovedescribed work.
- 12. The Scientific Research Section determined that conversion of the Yankee Gas Field to storage would not constitute a "major state activity" as defined in the Governor's Executive Order 1974-4 and therefore does not require the preparation of an environmental impact statement. The Michigan Environmental Review Board was notified of this decision by letter of April 29, 1977.

The Commission FINDS that:

- a. Jurisdiction is pursuant to Section 2, 1923 PA 238, as amended, MCLA 486.252; 1969 PA 165, as amended, MCLA 483.151 et seq.; 1969 PA 306, as amended, MCLA 24.201 et seq.; and the Commission's Rules of Practice and Procedure, 1954 Administrative Code, Supplement No. 54, R 460.11 et seq.
- b. The present or future public convenience and necessity requires the acquisition by Applicant of property or interest in that area known as the Yankee Gas Field, located in Sections 25 and 26 of St. Clair Township, St. Clair County.
  - c. The Yankee Gas Field is safe for development and operation of gas storage.
  - d. The requirements of Executive Order 1974-4 have been met.

## THEREFORE, IT IS ORDERED that:

- A. A certificate is hereby granted to Southeastern Michigan Gas Company, pursuant to the provisions of Section 2, 1923 PA 238, as amended, MCLA 486.252, to acquire property or interest in that area known as the Yankee Gas Field, located in Sections 25 and 26 of St. Clair Township, St. Clair County, Michigan.
- B. The Yankee Gas Field shall be developed and operated by Applicant as a gas storage field with a maximum allowable operating pressure of 1,400 psig at the well-head.
- C. The development and operation of the Yankee Gas Storage Field by Applicant shall remain subject to such orders and continuing supervision, including filing of reports, as from time to time are required by this Commission

The Commission specifically reserves jurisdiction of the matters herein contained

and the authority to issue such further order or orders as the facts and circumstances may require.

MICHIGAN PUBLIC SERVICE COMMISSION

/s/ Daniel J. Demlow
Chairman

(SEAL)

/s/ Lenton G. Sculthorp Commissioner

By the Commission and pursuant to its action of July 11, 1977.

/s/ Thomas R. Lonergan
Its Secretary